

# BMW of North America, Inc.

May 12, 2000

00V-142 (01)

Mr. Kenneth N. Weinstein  
Associate Administrator for Safety Assurance  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
US Department of Transportation  
400 7th Street, SW  
Washington, DC 20590

RECEIVED  
MAY 17 AM 6:10  
OFFICE  
DEFECTS INVESTIGATION

**RE: Recall Campaign - Engine Idler Pulley  
1999-2000 Model Year Land Rover Discovery Series II with ACE system.**

Dear Mr. Weinstein:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573.

Pursuant to Section 573.5 (c) of the above, we submit the following information:

**1. Manufacturer Corporate Name:**

Rover Group Ltd.  
Solihull, United Kingdom

**Affiliated U.S. Importing Company and Agent:**

Land Rover North America, Inc.  
4371 Parliament Place  
PO Box 1503  
Lanham, MD 20706

**2. Identification of Affected Vehicles:**

Based on analysis of the failure mode of the left hand engine idler pulley, the following vehicle population was identified.

**Subject Component: V8 Idler Pulley Part # PQR101070**

**Subject Vehicles: 1999 and 2000 Model Year, Discovery Series II fitted with the Active Cornering Enhancement (ACE) system.**

Address  
1 BMW Plaza  
Montvale, NJ 07645-1988

Telephone  
(201) 573-2088

Facsimile  
(201) 782-0784  
(201) 830-8788

VIN: SALTY1240XA200255 to SALTY1247YA277044

VIN: SALTY1241XA900798 to SALTY1249XA907211

Produced from May 1998 to April 2000.

**3. Total Number of Vehicles Potentially Affected:**

7,120 Discovery Series II vehicles are affected by this recall.

**4. Percentage of Vehicles Estimated to Actually Contain the Defect:**

All vehicles within the VIN range in 2. above, that are equipped with ACE, may potentially exhibit the defect during service.

**5. Description of the Defect:**

The loading conditions present on the left side engine idler pulley of an affected ACE-equipped Discovery Series II vehicle can exceed the maximum calculated figure of the original design specification. Under maximum load conditions, the material of the pulley can fracture and ultimately fail.

Failure of the pulley material may cause the pulley to throw off the serpentine belt, which can result in a loss of engine auxiliary functions (power steering, water pump, alternator, air conditioning and ACE). While the vehicle's steering capability will remain intact, steering effort will be increased if the serpentine belt drive is lost. The loss of steering assist may increase the risk of a vehicle crash. Possible engine overheating and subsequent engine damage may result if vehicle operation is continued.

**6. Chronology of Principal Events:**

The affected idler pulley (PQR101070) was introduced on Land Rover Discovery Series II with the introduction of 1999 Model Year vehicles in May 1998.

The quality of the initial supply of parts exhibited excessive supplier process variability. A small number of pulleys exhibited a micro crack in the moulding adjacent to the bearing.

A component of improved quality (PQR101070) from a more capable supplier was introduced into production in February 1999 (VIN – XA213336). Vehicles sold or in retailer inventory were repaired under Service Action H369 issued on September 9, 1999.

Reports of failures of the new pulleys manufactured by the new supplier were first received during September 1999. A review of the pulley loads was conducted. As the result of this load review, an idler pulley machined from solid steel was designed. The machined solid steel idler pulley was introduced into production in April 2000.

The manufacturer of the affected pulley is:

MarkIV Automotive  
Dayco Europe Limited  
29a Crown Street  
Brentwood, Essex, CM14 4BA  
United Kingdom  
Phone +44 (0) 1277 236600

Land Rover has received no reports, nor is Land Rover otherwise aware of any accidents or injuries resulting from this defect.

**7. Case of Non-Compliance**

Not Applicable.

**8. Description of Corrective Repair Action**

The plastic idler pulley (PQR101070) will be removed and replaced with the newly designed steel pulley (PQR101150K). Customer notification is expected to begin by the end of May 2000.

**9. Copies of Dealer Communications**

Copies of the dealer notification documents (service bulletin and technical information bulletin (TIB)) will be submitted to NHTSA when available.

**10. Copy of Owner Communication**

A draft copy of the customer notification letter is attached.

**11. Manufacturer's Campaign Number**

Land Rover's campaign number is D216.

Should there be any questions regarding this report, please contact Mr. William Scully of BMW of North America, Inc. at 201-573-2069.

Sincerely,

  
for Karl-Heinz Ziwick  
General Manager  
Environmental Engineering

Attachment

# DRAFT

00V-142 (05)

May 2000

## Re: Safety Recall # 00V-xxx, Engine Idler Pulley

Dear Land Rover Discovery Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Rover Group, manufacturer of Land Rover vehicles, has determined that a defect, which relates to motor vehicle safety, exists in some model year 1999 and 2000 Land Rover Discovery II vehicles equipped with Active Cornering Enhancement (ACE).

### DESCRIPTION OF DEFECT

The loading conditions present on your vehicle's left side engine idler pulley can exceed the maximum calculated figure of the original design specification. Under maximum load conditions, the material of the pulley can fracture and ultimately fail.

Failure of the pulley material may cause the pulley to throw off the serpentine belt, which can result in a loss of engine auxiliary functions (power steering, water pump, alternator, air conditioning and ACE). While the vehicle's steering capability will remain intact, steering effort will be increased if the serpentine belt drive is lost. The loss of steering assist may increase the risk of a vehicle crash. Possible engine overheating and subsequent engine damage may result if vehicle operation is continued.

### PRECAUTIONS

Should the serpentine drive belt fail, the battery charge and ACE warning lamps will illuminate immediately.

In the event of such a failure, the engine should be switched off as soon as safely possible and the vehicle should not be driven. It should be towed to an authorized Land Rover retailer where the specified repairs can be performed.

If you are not the sole driver of this vehicle, please advise all other drivers of these necessary precautions.

### DESCRIPTION OF REPAIR

This Recall action consists of your retailer installing an Improved Idler pulley. The parts necessary to complete this action are currently available at your Land Rover retailer. The time required to perform this Recall should be approximately one hour. Additional time may be required depending upon your retailer's scheduling and processing. The personnel at your retailer are fully prepared to serve you.

Please contact your Land Rover retailer immediately to have the necessary repair performed as soon as possible. Your retailer is prepared to make every effort to perform the modification at a convenient time that fits your schedule. If you experience any difficulty making these arrangements, please contact one of our Owner Care Representatives at 1-800-637-6637.

### PLEASE NOTE:

- If the vehicle to which this notice applies has been leased and you are the lessor, you **MUST** send a copy of this notice to the lessee.

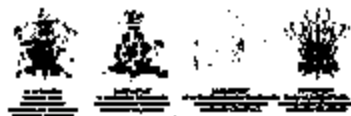
- If you no longer own the vehicle covered by this Recall, please complete the enclosed postage-paid Owner Information Card. If the vehicle has been sold, please indicate the new owner and address if known. If the vehicle has been destroyed, please indicate. We appreciate the return of the card at your earliest convenience.

If your retailer does not repair your vehicle without charge or within a reasonable period of time, you may notify the Administrator, National Highway Traffic Safety Administration, Washington, DC, 20590, or call the toll-free Auto Safety Hotline at 1-800-424-9393 (Washington, DC area residents may call (202) 366-0123). You may also call our Owner Relations Department [1-800-637-8837] or write to:

Land Rover North America, Inc.  
PO Box 1503  
4371 Parliament Place  
Lanham, MD 20706  
Attn.: Owner Relations Department

We apologize for any inconvenience caused by this Recall, but trust that you understand the need to have this condition rectified.

**Land Rover North America**



**Land Rover North America, Inc.**



13 October, 2000

00V-142.002 (01)

Mr. Kenneth N. Weinstein  
Associate Administrator for Safety Assurance  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
US Department of Transportation  
400 7th Street, SW  
Washington, DC 20590

**RE: Recall Campaign - Engine Idler Pulley  
1999-2000 Model Year Land Rover Discovery Series II and Range Rover**

Dear Mr. Weinstein:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573 and as a supplement to the May 12, 2000 submission on the same subject.

Pursuant to Section 573.5 (c) of the above, we submit the following information:

**1. Manufacturer Corporate Name:**

Land Rover Group Ltd.  
Solihull, United Kingdom

**Affiliated U.S. Importing Company and Agent:**

Land Rover North America, Inc.  
4371 Parliament Place  
PO Box 1503  
Lanham, MD 20706

DEFECTS INVESTIGATION  
OFFICE

NOV 16 PM 3:04

RECEIVED

Land Rover North America, Inc.  
4371 Parliament Place  
PO Box 1503  
Lanham, Maryland 20706  
United States of America  
Telephone 301 731-9040  
Fax 301 731-9054

00V-142.002 62

**2. Identification of Affected Vehicles:**

Based on analysis of the failure mode of the left hand engine idler pulley, the following additional vehicle population was identified.

Subject Component: V8 Idler Pulley Part # PQR101070

Subject Vehicles: 1999 and 2000 Model Year: Discovery Series II and Range Rover

Discovery Series II

VIN: SALTY1247XA200253 to SALTY1244YA277051

VIN: SALTY1245XA900000 to SALTY1249XA907211

Produced between May 1998 and April 2000.

Range Rover

VIN: SALPV144XXA400939 to SALPV1540YA443345

Produced between July 1998 and May 2000.

**3. Total Number of Vehicles Potentially Affected:**

A total of 44,031 vehicles are affected by this recall.  
(32,232 Discovery Series II and 11,799 Range Rover)

**4. Percentage of Vehicles Estimated to Actually Contain the Defect:**

All vehicles within the VIN range in 2. above may potentially exhibit the defect during service.

**SALTY1247**

**5. Description of the Defect:**

There are no changes in the description of the defect since the May 12, 2000 submission.



00V-142.002 (3)

**6. Chronology of Principal Events:**

The original investigation concluded that only vehicles equipped with Active Cornering Enhancement (ACE) were at risk from this defect, due to the higher loads introduced by the ACE system. Consequently, a recall campaign was launched in May 2000 (00V-142) in order to address vehicles equipped with ACE.

However, continuous monitoring of field data has highlighted idler pulley failures on vehicles not fitted with ACE, albeit at a lower failure rate than that of ACE equipped vehicles. Further detailed investigation has concluded that there is significant "vehicle to vehicle" variation in auxiliary belt load and that non-ACE vehicles are also at risk of failure.

Land Rover has therefore concluded that the recall campaign should be extended to encompass all vehicles fitted with the subject component.

Land Rover has received no reports, nor is Land Rover otherwise aware of any accidents or injuries resulting from this defect.

**7. Case of Non-Compliance**

Not Applicable.

**8. Description of Corrective Repair Action**

The plastic idler pulley (PQR101070) will be removed and replaced with the newly designed steel pulley (PQR101150K). Customer notification is expected to begin by 5 December 2000.

**9. Copies of Dealer Communications**

Copies of the dealer notification documents (service bulletin and technical information bulletin (TIB)) will be submitted to NHTSA when available.

**10. Copy of Owner Communication**

Draft copies of the customer notification letter will be sent for NHTSA review in the near future.

00F-142.002 (29)

**11. Manufacturer's Campaign Number**

Land Rover's campaign number is D216.

A copy of the May 12, 2000 submission is attached for your reference. Should there be any questions regarding this report, please contact me at 301-731-6583.

Sincerely,



Dennis T. Johnston  
Manager, Regulatory Compliance

PP

May 12, 2000

00V-142.002 (05)

Mr. Kenneth N. Weinstein  
Associate Administrator for Safety Assurance  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
US Department of Transportation  
400 7th Street, SW  
Washington, DC 20590

**RE: Recall Campaign - Engine Idler Pulley  
1999-2000 Model Year Land Rover Discovery Series II with ACE system.**

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Pursuant to Section 573.5 (c) of the above, we submit the following information:

**1. Manufacturer Corporate Name:**

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Solihull, United Kingdom

**Affiliated U.S. Importing Company and Agent:**

Land Rover North America, Inc.  
4371 Parliament Place  
PO Box 1503  
Lanham, MD 20706

**2. Identification of Affected Vehicles:**

Based on analysis of the failure mode of the left hand engine idler pulley, the following vehicle population was identified.

**Subject Component: V8 Idler Pulley Part # PQR101070**

**Subject Vehicles: 1999 and 2000 Model Year, Discovery Series II fitted with the Active Cornering Enhancement (ACE) system.**

Address  
1 BMW Plaza  
Montvale, NJ 07545-1855

Telephone  
(201) 573-2000

Fax/Facsimile  
(201) 782-0784  
(201) 930-8766



VIN: SALTY1240XA200255 to SALTY1247YA277044

VIN: SALTY1241XA900798 to SALTY1249XA907211

Produced from May 1998 to April 2000.

**3. Total Number of Vehicles Potentially Affected:**

7,120 Discovery Series II vehicles are affected by this recall.

**4. Percentage of Vehicles Estimated to Actually Contain the Defect:**

All vehicles within the VIN range in 2. above, that are equipped with ACE, may potentially exhibit the defect during service.

**5. Description of the Defect:**

The loading conditions present on the left side engine idler pulley of an affected ACE-equipped Discovery Series II vehicle can exceed the maximum calculated figure of the original design specification. Under maximum load conditions, the material of the pulley can fracture and ultimately fail.

Failure of the pulley material may cause the pulley to throw off the serpentine belt, which can result in a loss of engine auxiliary functions (power steering, water pump, alternator, air conditioning and ACE). While the vehicle's steering capability will remain intact, steering effort will be increased if the serpentine belt drive is lost. The loss of steering assist may increase the risk of a vehicle crash. Possible engine overheating and subsequent engine damage may result if vehicle operation is continued.

**6. Chronology of Principal Events:**

The affected idler pulley (PQR101070) was introduced on Land Rover Discovery Series II with the introduction of 1999 Model Year vehicles in May 1998.

The quality of the initial supply of parts exhibited excessive supplier process variability. A small number of pulleys exhibited a micro crack in the moulding adjacent to the bearing.

A component of improved quality (PQR101070) from a more capable supplier was introduced into production in February 1999 (VIN - XA213336). Vehicles sold or in retailer inventory were repaired under Service Action H369 issued on September 9, 1999.

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The manufacturer of the affected pulley is:

MarkIV Automotive  
Dayco Europe Limited  
29a Crown Street  
Brentwood, Essex, CM14 4BA  
United Kingdom  
Phone +44 (0) 1277 236600

Land Rover has received no reports, nor is Land Rover otherwise aware of any accidents or injuries resulting from this defect.

**7. Case of Non-Compliance**

Not Applicable.

**8. Description of Corrective Repair Action**

The plastic idler pulley (PQR101070) will be removed and replaced with the newly designed steel pulley (PQR101150K). Customer notification is expected to begin by the end of May 2000.

**9. Copies of Dealer Communications**

Copies of the dealer notification documents (service bulletin and technical information bulletin (TIB)) will be submitted to NHTSA when available.

**10. Copy of Owner Communication**

A draft copy of the customer notification letter is attached.

**11. Manufacturer's Campaign Number**

Land Rover's campaign number is D218.

Should there be any questions regarding this report, please contact Mr. William Scully of BMW of North America, Inc. at 201-573-2069.

Sincerely,



For  
Karl-Heinz Ziwick  
General Manager  
Environmental Engineering

Attachment